

## MEANS AND METHOD FOR THE TREATMENT OF NEUROLOGICAL DISORDERS

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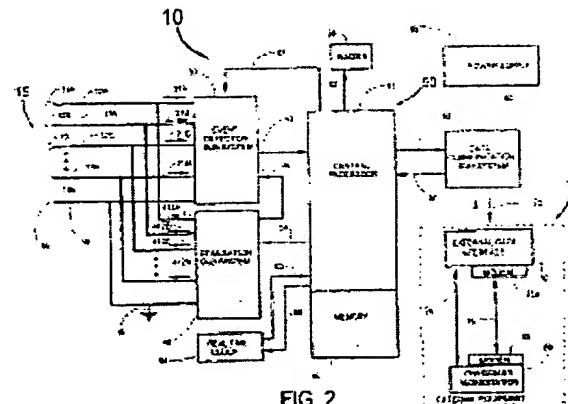
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### Abstract of CA2251852

Disclosed is a multiple electrode, closed-loop, responsive system for the treatment of certain neurological diseases such as epilepsy, migraine headaches and Parkinson's disease. Brain electrodes would be placed in close proximity to the brain or deep within brain tissue. When a neurological event such as the onset of an epileptic seizure occurs, EEG signals from the electrodes are processed by signal conditioning means in a control module that can be placed beneath the patient's scalp, within the patient's chest, or situated externally on the patient. Neurological event detection means in the control module will then cause a response to be generated for stopping the neurological event. The response could be an electrical signal to brain electrodes or to electrodes located remotely in the patient's body. The response could also be the release of medication or the application of a sensory input such as sound, light or mechanical vibration or electrical stimulation of the skin. The response to the neurological event can originate from devices either internal or external to the patient. The system also has the capability for multi-channel recording of EEG related signals that occur both before and after the detection of a neurological event. Programmability of many different operating parameters of the system by means of external equipment provides adaptability for treating patients who manifest different symptoms and who respond differently to the response generated by the system.



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